Are There Alternative Strategies for the Local Management of Ductal Carcinoma in Situ?

Kelly J. Rosso, MD, Anna Weiss, MD,
Alastair M. Thompson, BSc (Hons), MBChB, MD, FRCSEd (Gen)*

KEYWORDS

• Ductal carcinoma in situ (DCIS) • Active surveillance • Endocrine therapy

KEY POINTS

- Ductal carcinoma in situ (DCIS) is currently treated in similar ways to invasive breast cancer.
- Given the excellent breast cancer–specific survival for women with a diagnosis of DCIS, less invasive strategies than current therapy merit evaluation.
- Active surveillance of appropriately selected women with low-risk DCIS is the subject of several randomized clinical trials.
- Outcomes of invasive breast cancer and patient-reported outcome measures may change the way women with low-risk DCIS are managed in future.

INTRODUCTION

The management of ductal carcinoma in situ (DCIS) has largely shadowed the treatment of invasive breast cancer: surgical excision with adjuvant radiation and endocrine therapy for the prevention of further in situ or invasive events. As for invasive disease, patient selection for surgery, radiation therapy, choice of adjuvant endocrine therapy, and the potential role for neoadjuvant therapy have each become the subject of therapeutic trials in DCIS. Again as a parallel to invasive disease, locoregional control and event-free survival in the context of the morbidities of radiation therapy and drug therapies require consideration. There are now trials underway to address the question of overtreatment and determine whether nonsurgical management of low-risk (for progression) DCIS can be managed by medical therapy alone.

Disclosure: The authors have nothing to disclose.
Department of Breast Surgical Oncology, The University of Texas MD Anderson Cancer Center, FCT7.6092, Unit 1434, 1400 Pressler Street, Houston, Texas 77030-4008, USA
* Corresponding author.
E-mail address: AThompson1@mdanderson.org

Surg Oncol Clin N Am 27 (2018) 69–80
http://dx.doi.org/10.1016/j.soc.2017.08.002 surgonc.theclinics.com
1055-3207/18/© 2017 Elsevier Inc. All rights reserved.

SURGICAL MANAGEMENT

The current gold standard for surgical treatment of DCIS is excision to negative margins. Lumpectomy (segmental or partial mastectomy) with radiation or mastectomy represents guideline-concordant care for DCIS as outlined by the National Comprehensive Cancer Network (NCCN) treatment recommendations.[1] These guidelines are based on the findings of equivalent survival outcomes for patients with invasive breast cancer shown for both surgical approaches in randomized clinical trials.[2,3] The decision between breast conservation and mastectomy for DCIS is based on clinical, pathologic, and patient-related factors. DCIS is most commonly identified as a unifocal, nonpalpable lesion identified on mammography. Localization with a radioactive seed or wire is often necessary to facilitate breast conservation therapy (BCT). Multifocality, large-volume disease (with inability to obtain negative margins), or inability to obtain a favorable cosmetic outcome (even with oncoplastic techniques) may drive surgical decision making toward mastectomy. Although a nipple-sparing mastectomy may be appropriate for patients with early-stage, biologically favorable invasive cancers that are node negative and located in the periphery of the breast,[4] greater caution may be required for patients with DCIS. Extensive, centrally located, and subareolar DCIS less than 2 cm from the nipple areolar complex may be considered contraindications to a nipple-sparing approach. Contralateral prophylactic mastectomy incurs no survival benefit in patients who do not have a genetic predisposition for the development of invasive breast cancer[5] and thus should also be viewed with caution for individuals with DCIS.

When a mastectomy is planned for a diagnosis of DCIS, sentinel lymph node (SLN) biopsy should be considered, given the difficulty of axillary lymph node mapping if invasion is identified on final pathology after the breast has been removed. SLN biopsy alone carries a risk of wound infection, seroma, lymphedema, and pain/paresthesias, although lower than that associated with axillary lymph node dissection.[6] Hence, most clinicians caution that SLN biopsy for DCIS in BCT should not be routine[7–9] but considered at the time of completion mastectomy for positive/close margins following BCT (and attempted reexcision).[10]

RADIATION THERAPY

Women with DCIS who undergo breast-conserving surgery receive adjuvant radiotherapy in up to two-thirds of cases in published series. In contrast with invasive breast cancer, radiation therapy is rarely used following mastectomy for DCIS. Whole-breast radiotherapy following breast-conserving surgery reduces local recurrence (DCIS and invasive breast cancer) from 28.1% to 12.9% and reduces the incidence of invasive disease from 11.0% to 5.0% at 10 years as reported in a meta-analysis[11] based on key trials including the National Surgical Adjuvant Breast and Bowel Project (NSABP) B-17, NSABP B-24,[12] and the United Kingdom/Australia and New Zealand[13] (United Kingdom/ANZ) DCIS trials.

Although the extent of margin of clearance around DCIS has been hotly debated over the years, it is probable that at least a negative margin is required for the beneficial effects of breast radiotherapy to be realized. The dose and fractionation regimens for whole-breast radiotherapy for DCIS after breast-conserving surgery mirror practices for invasive disease, with a trend toward the use of hypofractionation and the potential added value of a boost to the tumor (DCIS) bed.[14] Whether alternative approaches to whole-breast irradiation to the DCIS resection bed (eg, using intracavity radiotherapy techniques) are equivalent to external beam radiation therapy is currently unclear and the subject of clinical trials. The side effects, such as skin

Download English Version:

https://daneshyari.com/en/article/8789892

Download Persian Version:

https://daneshyari.com/article/8789892

Daneshyari.com